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ABSTRACT

This working paper provides background for the U.S. Department of Education's first report to the nation on teacher quality, informing the ongoing work on state policy contexts for the improvement of teaching undertaken by the Center for the Study of Teacher Policy. The main goal is to illustrate the range of state-initiated actions aimed at improving the quality of teaching. Section 1 addresses state attention to educational reform and quality of teaching (recent focus on teaching quality, critical roles of states, and how states can promote teaching quality). Section 2 discusses how states are promoting visions of good teaching and learning (student standards and assessments, standards for teaching practice, and independent professional standards boards). Section 3 examines how states are attracting, rewarding, and retaining capable people in teaching (teacher recruitment needs, recruiting teachers and facilitating their mobility, ensuring teacher qualifications, using salaries to attract and retain teachers, and removing unqualified teachers). Section 4 discusses how states are improving the initial preparation and induction of teachers (standards and accountability, alternative certification, and beginning teacher induction programs). Section 5 looks at how states are motivating and supporting teachers' ongoing professional learning (differences in the quality of opportunities for professional learning, state guidance and resources for professional development, and developing or mandating specific targets for professional development). Section 6 discusses how states are enhancing the school workplace environment. (Contains 47 endnotes.) (SM)

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WHAT STATES ARE DOING TO IMPROVE THE QUALITY OF TEACHING

A Brief Review of Current Patterns and Trends

A CTP Working Paper

December, 1998

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Summary

This working paper is designed to serve two primary purposes: (1) provide background information for the U.S. Department of Education's first ever report to the nation on teacher quality; and (2) inform the ongoing work on state policy contexts for the improvement of teaching, undertaken by the Center for the Study of Teacher Policy (CTP), homebased at the University of Washington. The paper's main goal is to describe and illustrate the range of state-initiated actions aimed at improving the quality of teaching. This paper does not offer an evaluation of these actions.

The five questions which this working paper seeks to address are the following:

1. What are states doing to develop and project visions of good teaching and learning?

2. What are states doing to attract, reward, and retain capable people in teaching?

3. What are states doing to improve the initial preparation and induction of teachers?

4. What are states doing to motivate and support teachers' ongoing professional learning?

5. What are states doing to enhance the school workplace environment?

The focus of this paper is state policy. This is not to suggest that federal and district-level policies have not played a significant role in reform. They have, and no comprehensive assessment of contemporary school change efforts would be complete without consideration of policies at these levels. But this paper focuses on state-level policy changes and the role these can play in efforts to improve teacher quality.

The nation is currently in what might be called a "third wave" of the contemporary education reform movement set in motion during the early 1980s. In the earlier periods, reform efforts centered on intensifying student academic requirements, bolstering the structure of the teaching occupation, and restructuring schools. In this third wave, the policy focus is on improving the *quality* of teaching through, for example, better teacher preparation and higher quality, more relevant professional development.

States have played a crucial role in all three waves of education reform. This reform movement, perhaps more than any other in our nation's history, has been state-propelled and state-led. During the nearly two decades during which this movement has been in existence, state policies have done much to give shape and substance to local efforts to improve public schools.

While states enact a number of education policies, it is important for our purposes to distinguish between policies and a *policy strategy*. States may enact individual, separately conceived *statutes or initiatives*, each designed to create a specific instructional program or address a particular facet of the teacher quality challenge. Alternatively, states may create at one time, or evolve over time, a *policy strategy*, that is, a "package" of actions designed to address many facets of the policy problem, thereby resulting in cohesive, coherent, and sustainable public support for high-quality teaching. The extent to which state policies on improving teacher

quality reflect such strategic thinking can be a measure of a state's ability to bring about important and consequential change.

What are states doing to develop and project visions of good teaching and learning?

The simple answer to this question is: establishing standards for student learning and standards for teaching. Central features of contemporary state education reform efforts include developing and implementing higher and more rigorous academic standards for students, and creating assessments designed to gauge the extent to which students are meeting, or making progress toward, these standards. The development of statewide academic standards—49 states now have them—and accompanying assessments have focused state and local education policy on programs and ancillary policies designed to ensure that all students have opportunities to achieve at high levels. Through these means, states are attempting to articulate visions of what students should be learning and, consequently, what teachers should be doing to promote that learning.

While virtually all states have adopted standards for students, legislatures have been slower to consider standards for teaching. States are just beginning to think through and develop policies designed to ensure that teachers have the requisite knowledge and skills to help all students achieve at high levels. Clear expectations for what students should know and be able to do are key. An essential policy corollary is articulating what *teachers* should know and be able to do. Increasingly, state policy makers are realizing that teacher education programs often underprepare individuals for the classroom, state certification and licensing procedures are not sufficiently comprehensive, and ongoing professional development is not often linked to improving teaching practice. A number of states have begun to tackle some of these deficiencies, primarily by altering their certification and licensure policies (see below), and in some instances by seeking to bolster professional development.

What are states doing to attract, reward, and retain capable people in teaching?

The U.S. Department of Education estimates that two million new teachers will be needed in America's public school classrooms over the next decade. Recruiting adequate numbers of qualified teachers is now a priority for schools, districts, and states. States have taken steps to recruit mid-career professionals into teaching. Some have also enacted targeted efforts to persuade more minorities to enter teaching, largely through the use of scholarship grants and programs aimed at preparing teacher aides for teaching careers. Finally, a number of states have developed streamlined license reciprocity agreements to make teaching credentials more portable and make it easier for teachers to move to geographic areas where they are needed.

Ensuring that teachers are capable is a related policy challenge. Assessing teaching quality is difficult at best. One of the most popular means of assessment is through teacher examinations, both prior to entry into teacher preparation programs and prior to attaining certification. The principal virtue of these examinations, which generally focus on basic skill competencies or specific subject matter knowledge rather than teaching ability, is that they ensure at least that teachers possess minimal knowledge and skills. Yet even these tests remain controversial, with many arguing that the knowledge or skills assessed are not indicators of potential teaching success.

Teacher salaries have been viewed by many as a prime deterrent to attracting a larger number of quality teachers. Teaching pays less than other professions requiring similar levels of education. Those who consider a career in teaching must weigh intrinsic rewards against lower salaries and often difficult working conditions. The average teacher salary in 1997 was $38,436,

a 2.2 percent increase over the previous year.[1] This increase represents a slowdown from the more substantial salary increases teachers enjoyed throughout the 1980s.

States play varying roles in determining the compensation level of educators. While 23 states have implemented some form of a statewide salary schedule, salaries are generally determined through locally negotiated collective bargaining agreements. Some states have instituted financial rewards for group or school level performance, or for teachers who acquire and demonstrate particular knowledge and skills. Efforts to provide additional career-long compensation incentives are designed to encourage people to become teachers as well as to remain in the profession. In addition, a number of states and local districts are implementing new teacher pay schedules which revolve around assessments of teacher knowledge and skill, such as the achievement of certification through the National Board for Professional Teaching Standards.

States have focused not only on recruiting quality teachers into the profession, but also on teacher dismissal policies. Many states, for example, have reexamined teacher tenure policies, considering reforms ranging from abolition of tenure to extending teacher probationary periods to streamlining dismissal timelines. It is unclear, however, what effects these policies may have on the recruitment and retention of high quality teachers. Abolishing tenure laws, for example, can easily lead to the dismissal of good teachers (on personal or political grounds), as well as poor ones.

While teacher dismissal has been a state policy concern, less attention has been paid to the larger issue—developing and implementing more comprehensive teacher evaluation policies and procedures. Assessing teacher quality is more than a matter of identifying and eliminating teachers whose performance is so egregious that they should not be in a classroom. For the vast majority of teachers, whose teaching performance is not critically in question, developing policies and procedures that assess their particular areas of strength or weakness and support further developmental work is of critical importance.

In most states, teacher evaluation is subject to the district-level collective bargaining agreement. Some districts are adopting new, more comprehensive, and often controversial teacher evaluation programs. Among those that have received the most attention are peer review programs, in which teachers assess the professional performance of their colleagues and assist them in developing greater competence. To date, evidence about these programs is only anecdotal; but even this evidence suggests that peer review programs can be thorough and rigorous. They serve the dual purpose of "saving" more beginning teachers than traditional evaluation formats—ensuring that they do not leave within the first two or three years of their careers—and improving or removing from classrooms larger numbers of poorly performing teachers.

What are states doing to improve the initial preparation and induction of teachers?

Among state actions to enhance and expand teacher preparation are the development of program standards and systems of accountability, the design of alternative routes to certification (some of which offer strong preparation for teaching, others only minimal preparation), and the creation or expansion of beginning teacher induction programs. With the policy focus of teacher education now shifting from "inputs" such as course requirements, to "outcomes" which demonstrate teaching competence, many colleges and universities have undertaken major reforms of their education programs, adding fifth years of study, extending the length of internships, and participating in professional development schools. And there is increasing emphasis on subject matter preparation as well. States are also working toward using certification assessments to hold schools of teacher education accountable for preparing qualified teachers.

Alternative routes to achieving teacher certification have grown in popularity in recent years. A combination of teacher shortages (regionally and in particular subject areas), the need for preparation models other than four-year undergraduate programs for those who want to enter teaching later in their careers, and criticism of traditional teacher preparation programs have made a variety of alternative routes a more attractive option for policy makers. Most of these are graduate level programs that offer a certificate and, often, a Master's degree to post-baccalaureate recruits to teaching. Some, however, are programs offering only a few weeks of training before placing recruits in classrooms as teachers of record. Because the standards are so variable, alternative certification remains controversial. There is likely to be a decline in quality with the increased speed of moving teachers into classrooms.

Among the most common policies at the state-level are those that offer some kind of formal induction support for beginning teachers. While these programs vary considerably from state to state, and even among districts within a state, there is widespread support among state policy makers, at least rhetorically, for doing something to enhance teachers' introduction to teaching.

What are states doing to motivate and support teachers' ongoing professional learning?

Although nearly all public school teachers participate in some sort of professional development activity each year, very few educators receive the types of opportunities that have been demonstrated to be effective. District-sponsored professional development remains the norm. School- or local district-sponsored workshops and inservice programs tend to be of the one-shot, and generally brief, variety, precisely what the research describes as ineffective professional development. And state professional development requirements for teachers to renew certification may contribute more to the problem than the solution because most requirements are for "clock hours" of staff development, with few regulations guiding the quality and content of these offerings.

Despite these widespread patterns, a number of states are attempting to provide more guidance and financial support to school districts, in part to bolster statewide professional development infrastructures, and in part to stimulate particular kinds of professional development opportunities for teachers. In addition, many states are mandating that districts target specific areas for teachers' professional learning, as well as insisting that districts pay explicit attention to the professional development function in district accreditation, assessment, or goals. A few states have been attempting to remove one of the most critical barriers to enhanced professional development—the limited time allotted for teachers to take advantage of professional development opportunities.

What are states doing to enhance the school workplace environment?

For practicing teachers, various forces and conditions in the school are likely to contribute to their sense of a productive and supportive environment in which to work. These include a close knit community of colleagues, time to reflect and plan, supportive leadership, access to resources and advice, and a manageable load of classes, students, or other assignments.

States have been rather slow to become involved in education policy at the level of "workplace environment". Typically, legislatures have taken few actions that might be construed as imposing school level requirements on local districts. Local policies in the area of workplace environment generally are set by locally elected school boards, and many of these decisions are the result of district specific teacher collective bargaining contracts.

Despite their deference to local school boards, districts, and individual schools in matters related to the school improvement, states have undertaken initiatives of several kinds which treat

the individual school as the target and relevant unit of change. In addressing the school program as a whole, these state actions have aimed at the quality of teaching in at least three ways, by:

- Encouraging mission development, planning, and collaboration among school staff. State legislative initiatives in several states, for example, specify that schools develop site-specific plans for improving the teaching and learning at the site.

- Making resources available for school-based professional development, along with guidance or sometimes requirements which encourage professional development to be tailored to the needs of the individual school.

- Designing policies that facilitate greater school-level autonomy and allowing individual schools to redesign the workplace environment, typically within fairly stringent guidelines. One of the principal ways states have made possible the devolution of control over the schools (and within them matters related to teaching) is through regulation waivers, though relatively few schools appear to have taken advantage of the flexibility such arrangements allow. More radical attempts to maximize school-level autonomy have also been undertaken through charter school legislation, once again affecting relatively few schools in the 33 states which have charter school laws.

Unfinished Business and Unanswered Questions

Policies regarding various aspects of the teacher quality agenda are evident in nearly every state. But to assert that states have policies that have as their goal improving teacher quality is still to beg the issue of policy versus policy strategy. How close do state policies come to being definable policy strategies? To what extent might state policies, in the aggregate, be viewed as legislative actions which are cohesive, coherent, and sustainable?

While nearly all states have embraced one or more components of a teacher quality agenda—developing and projecting visions of good teaching and learning; attracting, rewarding and retaining capable individuals in teaching; improving the initial preparation and induction of teachers; motivating and supporting teachers' professional learning; enhancing the school workplace environment—few have adopted the entire agenda as a policy priority. Thus state policies in the area of improving teaching often have an idiosyncratic and disjointed feel.

The challenge for state policy makers now has several dimensions. The first part of the challenge is to determine which are the appropriate *state* policy levers that, when pulled, can contribute to improving teaching. Second, state policy officials need to take steps to ensure that future policies are component parts of a cohesive set that, when fully enacted and implemented, will be sufficiently coherent to form a long-range and long-lasting policy strategy that will have the result of enhancing teacher quality.

Policy makers must also wrestle with difficult trade-offs in designing sustainable policy strategies aimed at teacher quality. Chief among these is the question of how to balance aggressive, centralized action at the state level with initiative exercised by schools, communities, districts, professional groups, and institutions of higher education. Policy makers must also develop appropriate data sources to determine whether and how the current array of teacher policies are achieving the ends for which they are designed. The range of policy initiatives described in this working paper are largely new and relatively untested.

Introduction

This working paper is designed to serve two primary purposes: (1) to provide background information for the U.S. Department of Education's first ever report to the nation on teacher quality; and, (2) to inform the ongoing work of the Center for the Study of Teacher Policy, a consortium of five universities dedicated to investigating the connections between federal, state, and/or local policies and the quality of teaching and learning. The paper's main goal is to describe and illustrate the range of state-initiated actions aimed at improving the quality of teaching. This paper does not offer an evaluation of these actions.

The five questions which this working paper seeks to address are the following:

1. What are states doing to develop and project visions of good teaching and learning?
2. What are states doing to attract, reward, and retain capable people in teaching?
3. What are states doing to improve the initial preparation and induction of teachers?
4. What are states doing to motivate and support teachers' ongoing professional learning?
5. What are states doing to enhance the school workplace environment?

We begin by briefly setting state teacher policy in the context of recent education reform history, and discussing the nature and importance of state-level efforts aimed at teacher quality. It is important for the reader to be cognizant of two caveats. First, while throughout this paper we offer examples of state-level efforts to address one or more of the five questions posed above, these are simply that—examples designed to make a particular point or describe a type of program. Examples should be considered illustrative, but by no means exhaustive of states' involvement in education reform and efforts to improve teacher quality.

Second, the focus of this paper is state policy. That is not to suggest that federal or district policies have not played a significant role in reform—they have, and no comprehensive assessment of contemporary school change efforts would be complete without consideration of policies at these levels. But this paper focuses on state-level policy changes and the role these have played in education reform, and particularly in efforts to improve teacher quality.

State Attention to Educational Reform and the Quality of Teaching

In the course of its 15-year life span, the contemporary movement to improve this nation's public schools has moved through three distinct cycles, or, as they are often called, waves. The first wave, dating from the release of *A Nation at Risk* in 1983 until the late 1980s, might properly be called "intensification". This was the period in which national and state-level education reform discussions centered on matters such as implementing higher and more rigorous academic standards for students, designing new curricula around these standards, ensuring that all students take more—and more rigorous—courses, and creating new kinds of assessments aligned with new standards and curricula.

The first reform wave produced mixed results. On the one hand, this intense focus on standards, curricula, and assessments began to move policy makers' and educators' focus away from a traditional input-driven system to one more intensely concerned with outcomes. In other words, education began to revolve around what students were learning rather than simply around the type and level of resources being allocated to their educations. However, on the other hand, earliest efforts at reform were based on the notion that if educators were to continue to do many of the same things they had always done—at least in terms of organizing schools for teaching and learning—only do them harder, faster, and generally under stricter state scrutiny, improved student achievement would be the result. Such did not prove to be the case.

By the mid- to late 1980s, reform efforts had expanded and a second wave began. Policy makers and educators began to understand that certain characteristics of the teaching occupation and of schools were critical factors in students' potential for academic success. In addition to focusing on student standards and assessment, reforms began to focus on the structure of the teaching occupation and the overall structural features of schools. Thus, teachers' salaries in many states and districts were raised; teachers were often provided with some additional decision making authority; and, to a limited extent, opportunities were created that would allow teachers to advance professionally without leaving the classroom. But despite hard work and good intentions, after a decade of second-wave reforms, the nation still could not boast great upswings in measurable student achievement.

The Recent Focus on the Quality of Teaching

Thus, we have begun a third wave of education reform, focused on improving the *quality* of teaching through, for example, better teacher preparation, higher quality professional development, teaching standards, and a more comprehensive attempt to boost the

professionalism of teaching. Central to this wave of reform has been the recognition that capable teachers are inescapably the most critical link between public aspirations for better schooling and the actual performance of children.

Policy attention to improving the quality of teaching has been spurred, at least in part, by the release of *What Matters Most: Teaching for America's Future*, the 1996 report of the National Commission on Teaching and America's Future. As this report so clearly states, "What teachers know and can do makes the crucial difference in what children learn." The National Commission's five principal recommendations offered a virtual blueprint for nationwide efforts to improve teaching quality, which focused on student and teacher standards, the reinvention of teacher preparation and professional development, the overhaul of teacher recruitment, reward for teacher knowledge and skill, and the organization of schools to maximize student and teacher success. While not the only voice advocating attention to the quality of teaching, nor the first, the National Commission's work has helped provide both a framework for considering state-level action on behalf of teachers, and demonstrations in a dozen states of how these actions might be taken.

The Critical Role of the States

States have played a crucial role in all three waves of education reform. This reform movement, perhaps more than any other in our nation's history, has been propelled and led by state political leaders, educators, and allied professional groups. It is state policies that largely have given shape and substance to efforts to improve public schools.

Many actors and agencies contribute to state policy—among them, governors and state legislators; interest groups and professional associations representing teachers, administrators, school boards, and parents; state boards of education; the superintendent of public instruction (who, in a number of states, is an elected government official) and the state department of education; and teacher licensing boards.

And states vary in their approaches to education policy. Some states' education policies might generally be characterized as broad and sweeping. In these states, policy makers view the appropriate role of state policy as developing student learning goals, setting achievement standards, overseeing the development of assessments, and designing accountability systems. Other states construe state policy in more specific terms. In these states, policy makers enact statutes that, for example, prescribe a specific method of reading instruction or determine for local districts the language programs that should be offered for students whose native tongue is not English. State policy preferences are reflected in the kinds of reform efforts a state undertakes.

There are thus many ways that states can and do devote attention, energy, and resources to improving the quality of teaching. In this paper, we single out five realms of state-level activity that, separately and together, may shape what goes on in the classroom. In particular, states can:

- *Develop and project visions of good teaching and learning*, through student learning standards and related curricular frameworks, various forms of assessment, and through professional standards.

- *Attract, reward, and retain capable people in the teaching profession*, through outreach and recruitment efforts (e.g., targeted to areas of critical teacher shortage), assessment of entry qualifications, compensation and incentive systems, and various forms of recognition and reward for accomplished work.

- *Support high-quality initial preparation and induction of new teachers*, through accreditation and program approval processes, allocation of resources for mentoring, and engagement of teacher educators in the process of developing and implementing school reforms.

- *Motivate and support teachers' ongoing professional learning*, through the allocation of resources for professional development, requirements for practicing teachers to continue their learning, and approval of or support for groups that offer teachers opportunities for professional development.

- *Enhance the school workplace environment*, through regulatory flexibility, attempts to promote school-site discretion in matters directly related to the learning of both students and teachers (e.g., teachers participation in the design of professional development), and the allocation of resources and incentives for schools to experiment with productive staffing and arrangements of time.

These areas of state action can be pursued separately and selectively, or more strategically through efforts that try to bring multiple areas of teaching policy to bear on the challenges teachers face in the classroom. Thus, while states annually enact a number of education policies, it is important to distinguish between *individual statutes or initiatives* designed to enact specific instructional programs or address a particular facet of the teacher quality challenge, and *policy strategies*, that is, a "package" of actions designed to result in cohesive, coherent, and sustainable public support for high-quality teaching. The extent to which state policies on improving teacher quality reflect such strategic thinking can be a measure of a state's ability to bring about important and consequential change.

In the remainder of this paper, we review what states are now doing in each of the five realms noted above, and then conclude with comments about the degree to which states are addressing the problem of teacher quality strategically.

What States Are Doing to Promote Visions of Good Teaching and Learning

Put simply, states have concentrated considerable energy on establishing standards for student learning and, to a lesser degree, standards for teaching (e.g., as expressed through new certification requirements). In addition, some states have taken steps to establish bodies that can oversee professional standards for teaching on an ongoing basis. Through these means, states are attempting to articulate visions of what students should be learning and, consequently, what teachers should be doing to promote that learning.

Student Standards and Assessments

Answering the question, "What do we want students to know and be able to do?" has occupied the time and attention of policy makers in a majority of states. Central features of contemporary state education reform efforts include developing and implementing higher and more rigorous academic standards for students, and creating assessments designed to gauge the extent to which students are meeting, or making progress toward, these standards.

Together, the state standards and associated assessments send messages to teachers about what to teach, and often how to teach it. Sometimes the messages are mixed, as when standards and assessments are not fully aligned, or more often when assessments do not capture the full range of learning assumed by a broad standard. In other instances, states have worked hard to relate standards and assessments closely to one another.

Prior to efforts to identify and articulate *statewide* academic standards, each school district within a state might have had different standards from its neighbor districts, or perhaps no clearly stated standards at all. The absence (or near-absence) of standards could mean that students were unlikely to know what was expected of them, teachers might not have a clear picture of what students were to learn—and, therefore, what they were to teach—and the public's understanding of the content of their community, district, or state educational program might be vague at best. The development of statewide academic standards is one way to focus state and local education policy on programs and ancillary policies designed to ensure that all students have opportunities to achieve at high levels. And although many states allow districts to develop goals and create curricula that exceed state standards, these standards nonetheless may serve the purpose of establishing clear, minimum expectations for teaching and learning, when they are well-designed.

Currently 49 states are developing or have developed common statewide academic standards. Iowa is the only exception, and even in this state, local school districts are required to have clear learning goals for each grade level. Standards, moreover, are not static. Between 1996 and 1997, 39 states revised existing standards or developed new ones.[2]

States have also mandated assessments to gauge students' progress toward these standards. Forty-six states either have in place or are in the process of developing assessments; the alignment of these assessments with standards is still highly varied. Thirty-four states are currently assessing achievement in all four core subject areas (math, science, English, and social studies), although their assessments are not always aligned with their standards.[3]

The assessments, and related accountability requirements, offer a specific picture to teachers of what they should be teaching, and even imply approaches to teaching that might prepare students for what will be tested. While debate swirls about whether some assessments unnecessarily narrow the curriculum or simply reinforce the most important (or testable) aspects of it, it is clear that assessments attract teachers' attention, underscore for them what is important to teach, and exert considerable influence on actual classroom practice. State actions in this regard are thus based on the premise that teachers will "teach to the tests" that matter for their students and for their own professional reputation.

Standards for Teaching Practice

While virtually all states have adopted standards for students, state actors (e.g., state boards of education, education departments, bodies responsible for professional standards, legislatures) have been slower to consider standards for teaching. States are just beginning to think through and develop policies designed to ensure that teachers have the requisite knowledge and skills to help all students achieve at high levels. Clear expectations for what students should know and be able to do are key. An essential policy corollary is articulating what *teachers* should know and be able to do. Increasingly states are realizing that teacher education programs often underprepare individuals for the classroom, state certification procedures are not sufficiently comprehensive, and ongoing professional development is not often linked to improving teaching practice.

A number of states have begun to tackle some of these deficiencies by altering their certification and licensure policies. Changes in certification requirements continue to be a prime policy lever used by states to improve teaching quality. States such as Connecticut have used certification as a means to assure teacher performance relative to an accepted set of professional standards, and more than twenty states have adopted the Interstate New Teacher Assessment and Support Consortium (INTASC) standards to help promote a basic level of competence for

beginning teachers. Among the ways in which states altered their certification statutes in 1997-98 are the following:

- Alaska now requires that teaching certificate applicants attend an accredited higher education institution.
- Florida unveiled minimum competencies necessary to become certified.
- Mississippi modified its license requirements for both alternative certification and for those applicants from an approved teacher education program.
- New Hampshire created the credential of master teacher.
- North Carolina diversified its certification procedures, creating a three-tiered system of initial, continuing, and advanced certification tied to performance assessments, including those of the National Board for Professional Teaching Standards (NBPTS).
- Oregon created new Teacher Standards and Practices license categories with a professional development requirement attached to credential renewal.
- Texas created additional certification provisions, allowing educators to teach outside of their subject area or grade level upon satisfactory completion of an examination or other assessment of qualifications.
- Ohio, Indiana, and Maryland, among others, overhauled their licensing and accreditation systems to incorporate NCATE standards for teacher education accreditation, INTASC standards for beginning teacher licensing, and NBPTS standards for accomplished teaching.

Independent Professional Standards Boards

How the teaching profession is governed—who sets requirements for initial and continuing licensure, and how standards of good practice are enunciated and enforced—are critical state policy decisions. To the extent that teaching standards can be insulated from the continually shifting politics of a state, they can serve as a foundation for building a profession capable of increasing student learning. Fourteen states have now established autonomous professional standards boards, generally composed, at a minimum, of representatives of the teaching profession and the public. Most of these boards are relatively new entities. The degree to which they have true independence and decision making authority, rather than a solely advisory function (e.g., to inform the state board of education) is still an open question.

What States Are Doing to Attract, Reward, and Retain Capable People in Teaching

Attracting smart and capable people into teaching and ensuring that these people remain in the profession are policy issues of some considerable urgency, if classrooms are to realize the visions of good teaching and learning embodied in current state standards. In this regard, states have taken a number of actions designed to encourage individuals to enter teaching and ensure a more diverse teaching force. In addition, state policies are beginning to confront the twin issues of hiring demonstrably capable people and retaining only those who demonstrate acceptable levels of professional practice. Finally, states have taken steps to increase salaries for both novice and experienced teachers and are beginning to restructure salary schedules to reward teacher knowledge and skill.

Teacher Recruitment Needs

The U.S. Department of Education estimates that two million new teachers will be needed in America's public school classrooms over the next decade. Recruiting adequate numbers of qualified teachers is now a priority for schools, districts, and states. Why this huge demand for teachers?

Simultaneous shifts in the demographics of students and teachers are major forces in creating this unprecedented demand:

- The teaching population is aging rapidly. In 1966 just 18 percent of teachers were in the 40-49 year-old age range. By 1996, 41 percent of teachers were in this category.[4] Fully one-quarter of all teachers nationwide are 50 years old or older. Put another way, the average teacher in this nation is 43 years old.[5] While these figures illustrate a teaching corps with vast experience—nearly one-third of teachers have been in the profession for more than 20 years—they also point to new staffing dilemmas for schools as large numbers of teachers retire at the same time.

- In addition to an aging teaching force, increasing student enrollments, especially in the western part of the United States, bring added pressure and new demands for more teachers. California alone will see a 44 percent increase in K-12 enrollment as the result of the "baby boom echo", and a coincident need for additional teachers.

State policies are also contributing to this growing demand for teachers. As class size reduction grows in popularity among policy makers, additional teachers will be needed to reach mandated teacher-pupil ratios unless schools rethink staffing patterns to assign more of their certificated teaching staff as regular classroom teachers. (At least 25 percent of certificated

teaching staff are not assigned as regular classroom teachers; nationwide, the ratio of teachers to students is one to eighteen, yet class sizes average 25 or above.) Twenty states have passed or considered bills mandating reduced class sizes, particularly in grades K-3 where 20 students per class seems to be the most common mandate.[6] Given the strong support by educators and the public for reducing class sizes, this policy will likely continue to create the need for more teachers.

To be sure, some have disputed the impending teacher shortage. They cite the number of education bachelor's degrees awarded each year (currently between 130,000 and 150,000) and the number of certified teachers not in the classroom as evidence of an existing "reserve pool". For example, of the new public school teachers hired in 1993-94, 34 percent were former teachers reentering the profession.[7] But the issue is one of quality, not quantity, and of distribution by geographic and certification area. States are generally quick to lower standards to fill classrooms. California, which enacted class size reductions, now has thousands of "emergency credentialed" people staffing elementary classrooms. Moreover, considerable shortages exist nationally in particular areas such as bilingual and special education. Shortages also exist in mathematics, science and computers.[8] Finally, the distribution of practicing teachers and the "reserve pool", if any, do not always match the areas of greatest need. Urban areas in particular are often hard hit by teacher shortages. In a 1996 Recruiting New Teachers, Inc. (RNT) survey of the nation's largest school districts, virtually all districts cited an immediate need for teachers in high-demand areas.[9] Wealthier, often suburban districts with higher property tax bases can pay higher salaries and offer better work environments with smaller classes.[10] Schools serving low-income and minority students have a greater proportion of educators teaching out of their main field and without an advanced degree.[11]

The diversity of the teaching force is also becoming an issue for districts and states, especially given the changing demographics of the student population. Although nearly one-third of the U.S. public school population is minority—children of color and language minority students comprise over 75 percent of the students in the nation's 47 largest urban school districts— only 13.5 percent of the educator corps is teachers of color.[12] Not surprisingly, in response to the RNT survey, 92 percent of school districts reported an immediate need for teachers of color. Teaching also remains a largely female occupation, especially at the elementary school level. A large majority (85%) of districts responding to the RNT survey thus also cited an immediate need for male teachers.[13]

Recruiting Teachers and Facilitating Their Mobility

States are taking various approaches to this multi-faceted need for capable entrants into the teaching profession. For example, state legislatures are attempting to facilitate the entry of

minority candidates into the teaching profession. The following actions were taken in the 1997-98 legislative session:

- Connecticut provided incentive grants of up to $20,000 to encourage minority students to become teachers. Grants are available for up to 50 students who enter teacher education programs in their junior or senior years at four-year colleges or who are enrolled in a post-baccalaureate route to certification program.

- Florida established minority teacher scholarships that provide $4,000 per year to students pursuing a career in education. The law also created the Florida Fund for Minority Teachers, Inc., at the University of Florida's College of Education to administer the program.

- Oklahoma created a Minority Teacher Recruitment Advisory Committee.

- Both Virginia and West Virginia enacted teacher scholarship programs to recruit minority teachers and other educators to areas of high need.

States have taken a variety of other steps to draw people into the teacher profession from various sources. Mississippi, in 1998, established the Critical Needs Teacher Scholarship Program. Maryland considered (though did not enact this time around) legislation that would have created a teacher education scholarship program for students who pledge to teach in a public school in any of the state's counties experiencing an overall teacher retention rate of ten percent or less. Missouri was one of a handful of states that considered legislation to allow retired educators to work in schools part-time in various capacities without suspending retirement benefits.

Legislation in some other states has targeted mid-career professionals and paraprofessionals already working in classrooms. For example, California enacted two statutes establishing the California School Paraprofessional Teacher Training Program; the program enables 600 teacher aides from 24 districts to work toward, and earn, teaching credentials. Florida authorized a similar program in 1998. Still other states have sought ways to identify potential teachers at a much earlier age, starting in the high school years:

- North Carolina enacted the Teaching Fellows program in 1986. To date, 4800 scholarships of $20,000 have been awarded to high school seniors to participate in one of 14 university training programs. Recipients must participate in summer and academic year activities and maintain a 2.5 grade point average. Fellowship recipients who choose not to enter teaching must reimburse the full amount of the scholarship plus a 10 percent penalty.

- The South Carolina Teacher Cadet Program targets high school students who might be interested in teaching. This program engages students in a year long, college credit course focused on teaching and becoming an educator.

Some states have also paid attention to the uneven distribution of qualified teachers across states, and have taken steps to facilitate the movement of teachers from oversupplied states to those with shortages. Given the disparity in certification requirements among states, it is very difficult for teachers trained in states with an oversupply of educators to move to states in desperate need of licensed teachers. States have begun to take seriously the need for credential reciprocity. Forty states and the District of Columbia have signed the National Association of State Directors of Teacher Education and Certification (NASDTEC) Interstate Contract which assists educators moving to another state by providing a means of recognition of their educational training, assuming they have completed state approved teacher education programs or are state certified and have "adequate experience".

In addition, 33 states are now working with INTASC, founded by Connecticut and California in 1987, to create performance-based initial licensure standards. These states believe that ensuring that teachers meet a common set of standards, and that their professional preparation is assessed in similar fashion, will facilitate state-to-state certification reciprocity. While some states currently administer performance assessments for teacher licensure and other states are considering moving in this direction, the assessments are often not compatible with one another. In addition, more than 20 states have enacted legislation providing license portability and renewal for National Board Certified teachers.

Finally, state legislatures have taken a number of steps to make it easier for out-of-state teachers to begin teaching immediately. Missouri enacted a statute creating a provisional teaching certificate for out-of-state teachers. California enacted the Credentialed Out-of-State Teacher Recruitment and Retention Act of 1997, authorizing a school district to employ any teacher holding an elementary, secondary, or special education credential from a state other than California.

Ensuring Teachers Are Capable

Assessing teaching quality is difficult at best. One of the most popular means of assessment is through teacher examinations, both prior to entry into teacher preparation programs and prior to attaining certification. The principal virtue of these examinations, most of which generally focus on basic skill competencies or specific subject matter knowledge rather than on teaching ability, is that they ensure at least that teachers possess minimal knowledge and skills. Yet even these tests remain controversial, with many arguing that the knowledge or skills assessed are not indicators of potential teaching success.

According to the National Association of State Directors of Teacher Education and Certification (NASDTEC), 43 states now require new teachers to pass basic skills tests; 31 others

mandate tests to demonstrate subject matter proficiency. Indiana now requires license applicants to demonstrate proficiency in basic reading, math, writing, and pedagogy as well as in their specific subject area.

More controversial than pre-certification exams is the requirement that currently employed teachers pass an examination as a condition of retaining their jobs. North Carolina, as part of the Excellent Schools Act, required all teachers in low performing schools to pass a basic skills examination. But with a well-publicized lawsuit pending, the legislature repealed the mandated test.

Using Salaries to Attract and Retain Teachers

Teacher salaries has been viewed by many as a prime deterrent to attracting a larger number of quality teachers. Teaching pays less than other professions requiring similar levels of education.[14] Those who consider a career in teaching must weigh intrinsic rewards against lower salaries and often difficult working conditions.

The average teacher salary in 1997 was $38,436, a 2.2 percent change from the previous year.[15] This increase represents a slowdown from the more substantial salary increases teachers enjoyed throughout the 1980s. Moreover, while teacher salaries have risen in absolute dollars, they have shrunk consistently since 1960 as a percentage of overall education expenditures. Whereas the teacher share of K-12 costs was above 50 percent in the 1960s, it is now below 40 percent (37.8%).[16]

The benefits of raising teacher salaries as a means of attracting teacher applicants can be seen in Connecticut. As part of the 1986 Education Enhancement Act, that state raised salaries and equalized salary levels across districts. Connecticut now offers the highest teacher salaries in the country—the average teacher in that state earned $51,181 in 1996-97.[17] As a result of increased and more equalized salaries, Connecticut's teaching shortages have been virtually eliminated in both urban and rural communities throughout the state.

States play varying roles in determining the compensation level of educators. Twenty-three states have implemented statewide salary schedules, setting minimum levels of compensation while allowing local districts to pay above these amounts.[18] However, salaries are generally determined through locally negotiated collective bargaining agreements. Thus levels of compensation may vary greatly even within a single state.

A number of states have enacted legislation to raise teacher salaries:

- As part of the Excellent Schools Act in North Carolina, teacher salaries were raised with a goal of funding a minimum starting salary of $25,000 by the year 2000. Substantial salary increases for achieving a new standards-based Master's degree and National Board certification were also enacted.

- Arkansas created a new salary schedule in 1997, requiring that a teacher with a Master's degree and 15 years experience make greater than or equal to 150 percent of the minimum salary on the pay scale (currently $20,000).

- Alabama provided K-14 educators with an 8.5 percent cost of living adjustment. The state also passed separate legislation providing a cost of living increase in pension benefits.

- Iowa raised the minimum starting salary of teachers in the state to $23,000.

- Louisiana allocated $65.2 million in state funds to give every teacher a raise of approximately $1,000.

- West Virginia increased the state minimum salary for teachers by $756.

Rather than raise salaries for all educators, some school districts and states are targeting new teachers through one-time signing bonuses or other rewards designed particularly to entice quality teachers into harder to staff districts. The Baltimore school district, for example, is offering $5,000 toward the closing costs on a home in the city and $1,200 to cover new educators' relocation expenses. This is in addition to a $3,000 starting salary increase which brings beginning teachers' salaries to $27,300. Dallas has granted 900 signing bonuses of $1500 to new teachers. The Massachusetts legislature authorized a $20,000 signing bonus for 100 of the highest qualified new educators. The bonuses, to be drawn from a $60 million state pool, will be allocated over four years.

According to the National Center for Education Statistics (NCES), the percentage of public school districts offering various financial incentives has increased, but this approach still remains the exception rather than the rule. Only about 10 percent of school districts report the use of cash bonuses, increases on the salary schedule or other salary incentives to recruit teachers in shortage fields or to less desired locations.[19]

Other states—and local districts—have instituted financial rewards for group or school level performance, or for teachers who acquire and demonstrate particular knowledge and skills. Efforts to provide additional career-long compensation incentives are designed to encourage people to become teachers *as well as* to remain in the profession. Six states— Georgia, Indiana, Kentucky, North Carolina, South Carolina, and Texas—had enacted and funded such incentive programs as of 1994. Since that time, South Carolina has discontinued its program and Maryland has created a school-based incentives effort. North Carolina's ABCs program rewards employees of schools in which student achievement exceeds or meets predetermined improvement goals.

Teachers in schools that exceed achievement goals established in the Excellent Schools Act receive $1,500 bonuses; those in schools that meet (but do not exceed) achievement goals receive $750.

Other states are aiming more at the collective performance of the school. The Kentucky Accountability Program rewards schools that exceed improvement goals. Schools are free to determine how the funds will be used. In 1996 awards were approximately $2,000 per teacher in eligible schools, with a state total appropriation of $27 million. An accountability index, based on the results of subject area scores on open-ended and multiple choice tests and student portfolios, is used to measure school improvement.[20] Maryland's School Performance Recognition Awards uses results from school performance assessments to reward elementary and middle schools that make "substantial and sustained" progress. In 1996 nearly half of the schools received recognition with both monetary awards and non-monetary certificates of achievement. About ten percent of schools shared $2.75 million in bonus funding. Funds are designated specifically as a boost for improving schools, rather than a reward for already high achieving schools.[21]

Finally, a number of states and local districts are implementing new teacher pay schedules which revolve around assessments of teacher knowledge and skill, such as the achievement of certification through the National Board for Professional Teaching Standards. Nine states—Alabama, Delaware, Georgia, Iowa, Kentucky, Mississippi, North Carolina, Ohio, and Oklahoma—provide salary supplements for Board Certified teachers. Douglas County, Colorado; Charlotte-Mecklenberg, North Carolina; Los Angeles, California; Cincinnati, Ohio; Minneapolis, Minnesota; Seattle, Washington; and Rochester, New York are among the districts rethinking their teacher pay structures.

Removing Teachers of Lesser Quality

States have focused not only on recruiting quality teachers into the profession, but also on teacher dismissal policies. Many states, for example, have reexamined teacher tenure policies, considering reforms ranging from abolition of tenure to extending teacher probationary periods and streamlining dismissal timelines. It is unclear what effects these kinds of policies might have on the recruitment and retention of high quality teachers.

Although Colorado and Georgia attempted, unsuccessfully, to abolish tenure, Oregon virtually eliminated it. School districts in that state now employ teachers on renewable two-year contracts. In the case of non-renewal, the teacher is placed on an improvement assistance program. If a contract is not extended for a new two-year term after the program, then written notice must be given to the teacher and an appeal process to the Fair Dismissal Board is possible.

Oregon administrators were placed on three-year renewable contracts as part of the same reform effort. Such moves are controversial; critics, for example, argue that abolishing tenure can as easily lead to the dismissal of good teachers as poor ones—for a variety of reasons ranging from patronage to politics. Some believe that removal of tenure will harm recruitment as well.

Other recent state actions include the following:

- Arizona changed due process time requirements for the dismissal of teachers employed by a school district for more than the major portion of three consecutive school years.
- Colorado in 1997 created a task force to analyze teacher evaluation and dismissal issues. The following year the legislature passed legislation altering both policies, streamlining tenure hearings and requiring that the loser of an appealed ruling pay the court costs.
- Idaho authorized school board trustees to employ certified personnel on one-year limited contracts that require no additional notice for termination at the end of the contract year.
- Montana now allows school districts to terminate the employment of non-tenured teachers at the end of a school year with or without just cause, and requires tenured educators' appeals from a dismissal to be submitted to final and binding arbitration.
- New Jersey enacted a more expedited hearing process in teacher tenure cases.
- North Carolina streamlined its dismissal procedures under the Excellent Schools Act and extended the probationary period of teachers from three years to four.
- Rhode Island changed the requirements for tenure from three successive annual contracts to three within five successive school years.
- Wyoming authorized the suspension with pay pending teacher dismissal proceedings conducted under the Wyoming Teacher Employment Law.

Once again, in their zeal to facilitate the removal of teachers of lesser quality, these state actions may have simultaneously allowed the dismissal of highly competent teachers on personal or political grounds. In changing and often attenuating due process procedures, these actions do so for *all* teachers, not just those least suited for the teaching profession.

While teacher dismissal has been a state policy concern, less attention has been paid to the larger issue—developing and implementing more comprehensive teacher evaluation policies and procedures. Assessing teacher quality is more than a matter of identifying and eliminating teachers whose performance is so egregious that they should not be in a classroom. For the vast majority of teachers, whose teaching performance is not critically in question, developing policies and procedures that assess their particular areas of strength or weakness, and remediate areas of weakness, is of critical importance.

In most states, teacher evaluation is subject to the district-level collective bargaining agreement. Some districts are adopting new, more comprehensive, and often controversial teacher evaluation programs. Among those that have received the most attention are peer review programs, in which teachers assess the professional performance of their colleagues. To date, evidence about these programs is only anecdotal; but even this evidence suggests that peer review programs can be thorough and rigorous. They serve the dual purpose of "saving" more beginning teachers than traditional evaluation formats—ensuring that they do not leave within the first two or three years of their careers—*and* removing from classrooms larger numbers of poorly performing teachers. Ohio is so far the only state to put peer review into state policy, mandating this form of evaluation for all first-year teachers in the state.

What States Are Doing to Improve the Initial Preparation and Induction of Teachers

Because programs that offer prospective teachers their initial preparation for classroom work constitute the major gateway into the profession, and because the lessons learned in preparation programs are powerfully reinforced (or contradicted) in first teaching assignments, states have directed considerable attention recently to these aspects of the teacher quality challenge. Among state actions to enhance and expand teacher preparation are the development of program standards and systems of accountability, the design of alternative routes to certification, and the creation of beginning teacher induction programs.

Teacher Preparation: Standards and Accountability

State legislatures have often been reluctant to impose regulations on teacher preparation programs, relying instead on altering certification and licensure requirements, even though there are numerous examples of legislative action requiring teacher preparation programs to address a particular need, such as child abuse or drug abuse prevention. By mandating specific course requirements, states can leverage teacher preparation programs at least to offer courses in areas policy makers deem important; many such topics bear directly on classroom teaching, including instructional uses of technology, approaches to reading instruction, and the education of at-risk children. The Maryland State Board of Education, for example, now requires that all new teachers, and all practicing teachers seeking recertification, complete 12 semester hours in reading instruction. In this and other ways, states have begun, sometimes in tentative fashion, to deal with the tensions that often exist between state legislative directives and the historical program independence of colleges and universities that prepare teachers.

States have made modest moves, through new policies, to encourage teacher education institutions to focus somewhat less on inputs—such as the number of courses teacher candidates are required to complete—and somewhat more on outcomes—demonstrations of teaching competence. Accordingly, a sizable number of colleges and universities have undertaken major reforms of their education programs, adding fifth years of study, extensive internships and participating in professional development schools.[22] And there is increasing emphasis on subject matter preparation as well. For example, under a ten-principle plan to improve teacher preparation approved by the Georgia State Regents, all education majors will now be required to take additional coursework in areas they expect to teach. Furthermore, the system offers a guarantee on behalf of its graduates, by providing additional training for those unable to demonstrate effective teaching skills within their first two years in the classroom.[23]

Other states are now working toward using certification assessments to hold schools of teacher education accountable for preparing qualified teachers. The New York State Regents are considering closing education programs if 80 percent of graduates cannot pass state certification examinations. And Texas will put teacher education programs on probational accreditation if at least 70 percent of graduates do not pass the state licensure exam.

Currently, all states have some sort of approval mechanism in place for teacher education institutions, often based on either regional or national standards such as those of the National Association of State Directors of Teacher Education and Certification (NASDTEC) or National Council for the Accreditation of Teacher Education (NCATE). Forty-five states now have partnerships with NCATE, and fifteen states now use NCATE professional standards as the basis for state program decisions.[24] Maryland became the latest state to rely on NCATE accreditation when it required institutions of higher education that offer teacher training programs to receive national accreditation, or, under certain specified circumstances, a waiver from the requirement. The Maryland Department of Education, in connection with this accreditation program, is to develop and administer a program of technical assistance and is allowed to adopt specified regulations. Some other states, such as Washington, which do not require NCATE accreditation, have developed state program approval standards that parallel those of the national body in many ways.

Further reform in teacher education across the states is likely to be spurred by recent congressional action. New provisions in the reauthorization of the Higher Education Act target schools of education, requiring report cards on teacher colleges as well as parental access to teachers' professional qualifications. In this legislation, a dozen federal teacher preparation programs were replaced with state block grants targeted at more rigorous certification requirements and incentives for teachers to study, while in college, the subjects they intend to teach.

Alternative Certification

Alternative routes to achieving teacher certification, often designed to encourage larger numbers of minorities and mid-career professionals to enter teaching, have grown in popularity in recent years. A combination of teacher shortages (regionally and in particular subject areas), a need to provide preparation for post-baccalaureate recruits, and criticism of traditional teacher preparation programs have made these alternative routes a more attractive option for policy makers. The jury, however, is still out regarding whether these programs, or which of these programs, produce well-prepared teachers.

According to polling data from the National Center for Education Information (NCEI), 41 states, plus the District of Columbia, report having some type of alternative teacher certification. States report a total of 117 programs now available for persons with a bachelor's degree desiring to become licensed to teach.[25] NCEI estimates that 75,000 people have been licensed through alternative certification programs. Twenty-five states report the number of individuals being licensed by means of alternative routes has increased in the last five years.

Among state-supported alternative certification programs are two broad types: first, post-baccalaureate programs for mid-career entrants, which generally take longer, require more of their graduates, and have high completion rates; and, second, those that provide a "short cut" to the classroom, often with relatively short summer training experiences from which there is generally high attrition. Most states permit or support some version of post-baccalaureate alternative training, usually lasting 9 to 18 months, often offering a Master's degree. A few states, such as Texas, California, and New Jersey, have invested heavily in short-cut programs of one kind or another. The controversies that surround alternative certification hinge on this distinction. The most effective programs, judged in terms of teacher competence and retention, are generally longer term and involve considerable preservice coursework coupled with supervised internships in a master teacher's classroom.[26] On the other hand, where states permit alternative licensure programs to eliminate much of the coursework and clinical experience necessary for adequate preparation, these programs may have a direct, negative impact on both the retention of teachers and on their ability to perform in the classroom.[27]

Legislative action from 1997-98 displays state interest in alternative certification programs, particularly those that meet at least some rudimentary quality standards:

- Kentucky now requires alternative certification candidates to successfully complete a teacher internship program.
- Mississippi clarified its alternate teaching routes, mandating that applicants file an official transcript with evidence of a bachelor's degree from an accredited institution, and pass an examination of achievement. The state also directed the Board of Trustees of state universities to study the feasibility of creating a teacher education cooperative program at regionally accredited institutions of higher learning as well as community and junior colleges in the state. Program participants would serve as assistant teachers in school districts experiencing critical teacher shortages and waive standard student teaching requirements.
- The legislature in Washington State authorized an alternate certification program for individuals wanting to teach middle school, junior high, or high school students. The bill, vetoed by the Governor, would have required alternate route candidates to meet certain practical and experience requirements as well as complete an assessment of teaching knowledge. After two years of successful teaching under the alternate certificate, and

upon passing assessments of subject matter and teaching knowledge, the individual would be issued an initial or residency teaching certificate.

These policies are counterbalanced by others which appear to require less of newly entering teachers. For example, Wyoming passed a law in 1997 that allows university and community college instructors to teach high school classes without attaining certification. South Dakota attempted to pass a similar measure, allowing certain doctoral graduates to teach without certification, but the bill failed. The state also considered legislation that would have allowed certain persons with special expertise to instruct in the public schools without attaining certification. Such policies raise questions about the preparedness of teachers who arrive in classrooms through alternative routes.

Beginning Teacher Induction Programs

Data from the National Center for Education Statistics indicates that 56 percent of public school teachers in their first three years of teaching have participated in a formal teacher induction program, compared to 44 percent of those with 4-9 years experience and 17 percent of those with 10-19 years.[28] With estimates that 30-50 percent of beginning teachers leave the profession within their first five years,[29] a means of providing new educators with support is essential. While these beginning teachers leave the profession for numerous reasons—salary, workplace conditions, personal and family reasons, lack of parental support, etc.[30]—one of the most common reasons offered is lack of administrative and school support. Induction and mentoring programs help fill this gap.

According to NASDTEC, 28 states and the District of Columbia have some sort of induction program targeted at supporting beginning teachers. However, these programs vary in terms of the percentage of beginning teachers who participate. In 10 of these states, districts are not mandated to participate because states do not assume the full costs of the program. In Colorado, for example, no state funds are allocated specifically for districts to implement the program. In other cases, districts *are* mandated to participate, even though states do not assume the costs of the program. Other programs mandated by states are accompanied by funding ranging from state contributions of $20,000 in Mississippi to programs in Oklahoma, Kentucky, Indiana, Florida, Washington D.C., Connecticut, and California, where over one million dollars is specifically allocated for beginning teacher induction programs.[31]

Despite state specifications, there is wide disparity across school districts in the quality and criteria established for induction programs. School districts often have broad latitude, for example, in setting the criteria for participation in the program and in establishing the qualifications of mentor teachers. Often times, especially where no funds are available for a

mentor stipend, little support and evaluation are offered. And more importantly, few teachers have access to the programs. States such as Rhode Island and Massachusetts with locally established induction efforts find fewer than 15 percent of beginning teachers have received any kind of systematic mentoring.[32]

It appears that there is great payoff in establishing a comprehensive teacher induction program. California's Beginning Teacher Support and Assessment program (BTSA) has proved successful in retaining teachers, with an attrition rate of 9 percent of beginning teachers in five years, versus a rate of 37 percent without BTSA or a similar induction program.[33] Given these results, California in 1998 expanded the BTSA. The program, previously operating on a pilot basis, served only 17 percent of eligible teachers. Legislation enacted this year dramatically increases funds and expands BTSA to include all new teachers.

The 1997-98 legislative session saw states continuing to establish new, and expand existing, mentoring programs:

- The School Accountability Funding for Excellence Act in Maryland provides funds for the Baltimore County Teacher Mentoring Program and a Prince George County teacher mentoring program.
- Nebraska has instituted a mentoring program for first-year teachers. Funding comes from state lottery funds that are set aside for education innovation.

Policies that support formal induction for beginning teachers are especially common among state policy makers. While these programs vary considerably from state to state, and even among districts within a state, it is clear that state policy makers are in accord with regard to the value of a supported introduction to teaching. However, there are many questions about what constitutes adequate induction support for new entrants to the teaching profession; the existence of a state-supported induction program does not mean, by itself, that teachers are getting regular advice, coaching, or other forms of support they may need.

What States Are Doing to Motivate and Support Teachers' Ongoing Professional Learning

Although professional development has traditionally been considered a local district issue, a number of states are providing specific resources and some regulations designed to ensure both the equity and quality of professional development opportunities for teachers.

Differences in the Quality of Opportunities for Professional Learning

State policies on professional development are developing against a backdrop of emerging research that demonstrates that all professional development is not created equal. Both the quality and duration of professional development programs are important determinants of their ability to improve teaching practice and impact student achievement. In a recent analysis of mathematics instructional policy and professional development in California, for example, researchers found that teachers who participated in professional development that was sustained and based on curriculum standards for students were more likely to adopt new, reform-oriented teaching practices. Further, students of teachers who received this type of professional development achieved at higher levels on the state mathematics achievement test.[34] Other studies examining student achievement on the California Learning Assessment System support these findings: students perform at higher levels across all grades when they have teachers who have extended opportunities to learn about specific, standards-based curriculum and instruction.[35]

However, although 96 percent of public school teachers reported participating in some sort of professional development activity in 1993-94,[36] very few educators encountered the types of opportunities that have been demonstrated to promote significant and sustained professional learning. For example, only 30 percent of teachers participated in professional development that involved in-depth study in a specific field, and only 15 percent received nine hours or more of this type of training.[37]

District-sponsored professional development remains the norm for most teachers. School- or local district-sponsored workshops and inservice programs are what more than 80 percent of public school teachers encounter. But these learning opportunities tend to be of the one-shot, and generally brief, variety. More extended learning opportunities can be found in coursework offered by higher education institutions. About one-quarter of teachers engaged in professional development through university extension or college courses in their subject field.[38] This kind of

coursework has varying degrees of applicability to the immediate challenges of classroom teaching practice.

Variations in professional development focus, intensity, delivery, and participation patterns are evident across states. For example, according to the National Commission on Teaching and America's Future, more than 70 percent of teachers in Kentucky reported pursuing professional development opportunities about uses of technology, teaching methods, student assessment, and cooperative learning. About one-third of teachers in Nevada and Arkansas received training in the uses of technology. Only 10 percent of teachers in Illinois, New Mexico, and Tennessee had the chance to spend more than one day studying their subject area.[39]

State professional development requirements for teachers to renew certification may contribute more to the problem than the solution. Although 32 states mandate professional development for teacher certificate renewal,[40] most requirements are for "clock hours" of staff development, with few regulations guiding the quality and content of these offerings. And although the state education agency reviews components of the professional development requirement in 33 states,[41] even minimal standards regarding acceptable criteria are often absent from the state review process. In many states, virtually any kind of formalized learning experience can count towards a teacher's clock hours; not all such experiences have much relevance to the problems of teaching practice.

State Guidance and Resources for Professional Development

To address the perceived lack or low quality of professional development opportunities, a number of state legislatures have attempted over the past decade to provide school districts with more guidance and financial support related to the professional development function. These actions are especially important with research demonstrating that the creation of teacher professional development programs locally may depend heavily on the degree to which the state makes these activities a priority and the level to which it provides financial support to ensure their implementation.[42] Many states have implemented programs that begin to create or enhance statewide professional development infrastructures. For example:[43]

- California, a decade ago, enacted the Professional Development Act, expanding the California Subject Matter Projects (CSMPs) and the Professional Development Consortia. The CSMPs focus on pedagogy and content and rely on Saturday workshops, teacher-run leadership academies, newsletters, and a summer institute. The state allocated approximately $15 million for the program in 1995-96.

- The Connecticut Education Enhancement Act of 1986 created a professional development continuum to upgrade teaching standards. The Act requires districts to provide professional development opportunities and award continuing education credit.

- The Florida legislature passed the School Community Professional Development Act in 1995, establishing collaborative partnerships among the State Education Agency, colleges and universities, school districts, individual schools and consortiums to promote joint responsibility and coordination. The legislature allocates professional development funds to school districts at approximately $6 per student per year.

- The Kentucky Education Reform Act of 1990 increased professional development activities and funding. KERA requires local school districts to provide four days of site-based professional development annually and provides $24 per student in funding for this purpose.

- The Outstanding Schools Act of 1993 established nine regional Professional Development Centers in Missouri. The state mandates that one percent of the total district budgets be set aside for school-based professional development.

- Under the Teacher Preparation Act of 1995, Oklahoma mandates that eight specific areas of teacher competency for professional development be created by the Oklahoma Commission on Teacher Preparation.

- Vermont pioneered an initiative that links state academic standards with assessments and professional development by training teachers statewide to grade portfolios of student work. Teacher networks communicate across the state regarding grading sample student work and ways to achieve the results envisioned in state standards.

- West Virginia passed education reform legislation in 1990 creating a comprehensive state policy on professional development. Each school is required to establish a faculty senate and a School Improvement Council. These Councils are responsible for developing and implementing school-wide professional development plans. A professional development center was also established. The state sets aside funding to reimburse teachers for required professional development courses ($120,000 in 1996).

Beyond issuing requirements and exhortations or allocating some resources, a few states have been attempting to remove one of the most critical barriers to enhanced professional development: the limited time for teachers to take advantage of professional learning opportunities. Without adequate non-instructional time during the school day, it is difficult to provide sustained, curriculum-oriented opportunities. Unlike Germany, where there is greater flexibility in scheduling or Japan with shorter school days, U.S. teachers are not afforded the opportunity to work with colleagues.[44] Arkansas took a leap forward in 1997 when the state began to require school districts to provide a minimum of 200 minutes of scheduled time each week for teacher conferences and instructional planning and preparation.

Developing or Mandating Specific Targets for Professional Development

Along with policies that encourage more professional development, or seek to establish structures that will support it, many states have set forth specific targets for local professional development activity. While still relying heavily on school district discretion, states are mandating that districts include criteria for professional development in district accreditation, assessment, or goals. Many states seek to shape the professional learning opportunities available to teachers by mandating specific topics for teachers' inservice education, often related to particular education interests of policy makers or their constituents. Connecticut, for example, mandated that schools hold inservice days on a variety of topics, including drug and alcohol abuse discouragement, mental health risk reduction, growth and development of exceptional children, school violence and conflict resolution, CPR, and technology. Such an approach can lead to a fragmented array of inservice workshops that do not necessarily help teachers address the central problems of their practice. Other states have attempted to address teachers' professional development needs in more comprehensive and potentially integrated, ways. Among recent state actions in this realm of teacher policy are the following:

- Kentucky requires the Department of Education to assist districts and schools in the development of long-term school improvement plans that include professional development strategies to address curriculum content.
- Maryland established the Maryland Technology Academy and Maryland Technology Academy Pilot Program.
- New Jersey established the Education Technology Teacher Training Program.
- North Carolina, as part of the Excellent Schools Act, ordered the State Board of Education, in collaboration with the Board of Governors of the University of North Carolina, to identify and make recommendations regarding meaningful professional development programs for professional public school employees. These programs are to be aligned with state education goals and directed toward improving student academic achievement.
- Ohio created a Teacher Professional Development Task Force to outline a comprehensive structure for the delivery of continuing professional development for teachers.
- Oklahoma created the Professional Development Revolving Fund to be used to develop and administer programs for teachers and administrators. Additional legislation authorizes the creation of a Professional Development Institute in reading to train elementary school teachers and provides for additional institutes as funds become available.
- Virginia required the State Board of Education to provide technical assistance on professional development to local school boards to ensure that all instructional personnel are proficient in the use of technology consistent with its 6-year education technology plan.

- Washington State limited the educational credits that teacher can use toward career advancement to courses that are directly related to a teacher's current or expected areas of instruction.

Much is known about effective professional development. Research confirms that good professional development is generally school- or classroom-based, relates directly to what teachers are doing in their schools or classrooms, is often teacher-directed, and focuses intensely on assisting teachers to understand deeply the subject(s) they are teaching. Despite these research-based findings, however, less effective types of professional development remain the norm for most teachers. Nonetheless, there are excellent examples of state policies which build on the principles of good professional development and provide financial support for these programs.

What States Are Doing to Enhance the School Workplace Environment

To an extent, the quality of the school workplace environment is in the eye of the beholder. For some observers of schools, a productive school environment connotes buildings that are safe and clean. For others, a high quality school workplace refers to a group of staff who have the discretion to make at least some important education decisions for which they take full responsibility and are held accountable. For practicing teachers, various forces and conditions in the school are likely to contribute to their sense of a productive and supportive environment in which to work, among them, a close knit community of colleagues, time to reflect and plan, supportive leadership, access to resources and advice, and a manageable load of classes, students, or other assignments.

Although the federal government has begun to address the issue of school-level reform through the Comprehensive School Reform Demonstration project (also known as Obey-Porter for its Congressional sponsors),[45] states have been slower to become involved in education policy at this level of specificity. Even in more centralized state policy contexts, legislatures have taken few actions that might be construed as imposing school-level requirements on local districts. Local policies related to the quality of the school as a workplace for teachers generally are set by locally elected school boards, and many of these decisions are the result of district-specific collective bargaining contracts. Rather than deriving from state actions, the bulk of school-based and school-specific reform activity has come about through district initiatives, individual schools' efforts to restructure themselves, or schools' choices to participate in larger reform or restructuring networks (such as those associated with the Coalition of Essential Schools, Accelerated Schools, or "Success for All" schools, to name only a few of the most widely known networks).

Despite their deference to local school boards, districts, and individual schools in matters related to the school improvement, states have undertaken initiatives of several kinds—which treat the individual school as the target and relevant unit of change. In addressing the school program as a whole, these state actions have aimed at the quality of teaching in at least three ways.

First, they have sought to encourage mission development, planning, and collaboration among school staff. State legislative initiatives in several states, for example, specify that schools develop site-specific plans for improving the teaching and learning at the site. Teachers are almost inescapably central players in these kinds of interactions, which can result in various

adjustments to the organization of the school program, the nature of the curriculum, or teaching approaches. To be sure, mandated planning can also spawn "paper plans", which meet the requirement but do not guide actual practice.

Second, some states have made resources available for school-based professional development, along with guidance or sometimes requirements which encourage professional development to be tailored to the needs of the individual school (see the earlier discussion of what states are doing to promote professional development). As part of its standards-based reform effort, Washington, for example, allocates to all schools in the state annual School Learning Improvement Grants, which are largely used to support professional development activities that teachers choose or design, and that often take place at the school site, as well.

Third, states are designing policies that facilitate greater school-level autonomy, allowing individual schools to redesign the workplace environment, typically within fairly stringent guidelines. One of the principal ways states have made devolution of control over the schools possible is through regulation waivers. Several states allow districts to request an exemption of state rules and regulations. Many of these programs, however, are exemptions on a rule-by-rule basis, making the process cumbersome and complicated, and resulting in few districts applying for waivers.[46] Even in states like Texas, where districts have been able since 1996 to apply for "home-rule" status (involving a virtual automatic waiver of state rules and regulations), not a single district has applied.

A more radical attempt to decentralize decision-making authority to the school level has been through the enactment of charter school legislation. Currently 33 states and the District of Columbia have enacted charter school laws.[47] Defining a charter school is difficult given the variety of statutes and types of schools that have been created under the charter umbrella. Simply stated, however, charter schools are public schools that are freed from local and state laws and regulations. In return for this freedom, charters are to be held accountable for student performance; if the goals of the school set forth in the charter agreement are not reached, the school's charter, which is granted by a public entity (e.g., a local school board or college or university), can be revoked or not renewed. Some states may also maintain certain safeguards for children's education (e.g., requirements that teachers be qualified, that equity and safety be protected), and others do not. These safeguards may help to ensure that a charter school program has a reasonable chance of meeting its goals.

In their current form, charter school initiatives affect relatively few schools, and there remains significant debate about the ability of charter schools to realize their aspirations. In theory, charters free schools and teachers of the regulatory burdens other schools are presumed to shoulder, thereby enabling teachers to implement educational programs which reflect their

philosophy and are most responsive to the clientele attracted to the charter. Yet some recent research regarding teachers in charter schools that have been operating for at least two years reveals that these teachers may have only marginally more authority to shape their schools' educational programs than do teachers in other public schools. Consequently, the actual effect on this and other features of the workplace environment remain in question.

Unfinished Business and Unanswered Questions

This working paper was written with a focus on the intense policy spotlight that has been shined in recent years on the important education reform issue of improving teacher quality. States have played, and continue to play, a critical role in this area. Policies regarding various aspects of the teacher quality agenda are evident in nearly every state.

To assert that states are creating policies which have as their goal improving teacher quality is still to beg the issue of policy versus policy strategy. How close do state policies come to being definable policy strategies? To what extent might state policies, in the aggregate, be viewed as cohesive, coherent, and sustainable? Do the separate actions aimed at one or another aspect of the teacher quality challenge add up, in a given state, to a whole that is greater than the sum of the parts?

The majority of states are using student achievement standards as key building blocks for more all-encompassing reform actions. However, while nearly all states have developed, or are developing, student standards, and the curriculum and assessments that accompany them, few states have yet met the policy challenge of drafting and enacting *comprehensive* reforms designed to enhance teacher quality. While nearly all states have embraced policies aimed at one or more of the dimensions of teacher quality that we have considered in this paper, few have adopted a set of policies that systematically and strategically address all or most of these aspects. As a consequence, state policies in the area of improving teaching often have an idiosyncratic and disjointed feel.

The challenge for state policy makers now is two-fold. The first part of the challenge is to determine which are the appropriate *state* policy levers that, when pulled, can contribute to improving teaching. Second, state policy officials need to consider whether and how current and future policies can maximally reinforce one another when fully enacted and implemented. The challenge is indeed complicated, perhaps even a bit daunting. But to fail to accept it is tacitly to admit that improving teaching is too hard a task, and perhaps not worth the effort. It is hard to imagine that policy makers in any state willingly would reach this conclusion.

Yet in fashioning policy strategies aimed at teacher quality, state-level actors inside and outside of government will need to wrestle with fundamental dilemmas, especially the puzzle of how to balance aggressive, state-initiated action with initiative exercised elsewhere in the system—in schools, communities, district offices, professional groups, or institutions of higher education. The state actions described in this working paper represent a willingness by many states to act boldly and visibly in an area of educational activity that has heretofore been left to

others. The array of teaching improvement policies we have described thus represents a centralizing trend in state educational policy. However, there are well known trade-offs in centralization of control and initiative in a system that simultaneously prizes professional autonomy, identity, and discretion, not to mention local control of schools and schooling. State policy makers will need to proceed with the full understanding that there is no magic in mandates, and that authoritative action by legislatures, governors, or state departments of education is only one means to the goal of improving teaching. Ultimately, the challenge is to find the right balance of requirements, supports, inducements, incentives, and alliances that engages capable professionals in the enterprise of teaching and learning.

Policy makers will also need to assemble appropriate data sources to track how the policies described here actually affect teaching practice over the long term. Most of the policies referred to in this working paper are very new; few have proved themselves, in terms of either political sustainability or impact on teaching and learning. Hopefully, the will to engage in efforts to improve teacher quality will persist long enough to answer these questions.

Endnotes

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